AUG 2 2 2005 POR

SEQUENCE LISTING

RADEMARY	7	
RANK	<110>	Wary, Kishore, K.
		Humtsoe, Joseph O.
	<120>	Uses of Vascular Endothelial Growth Factor
		and Type I Collagen Inducible Protein (VCIP)
	<130>	D6563
	<140>	US 10/912,238
	<141>	2004-03-29
	<150>	US 60/458,164
	<151>	2003-03-27
	<160>	41
	<210>	1
	<211>	15
	<212>	PRT
	<213>	Unknown
	<220>	
	<221>	CHAIN
	<223>	peptide used to raise anti-VCIP-cyto-C16
		antibody
	<400>	1
Leu S	Ser Pro	Val Asp Ile Ile Asp Arg Asn Asn His His Asn Met
		5 10 15
	.0.4.0.	
	<210>	2
	<211>	20
	<212>	PRT
	<213>	Unknown
	4000	
	<220>	a
	<221>	CHAIN
	<223>	peptide used to raise anti-VCIP-RGD antibody
<100> 2		
C1 4	<400>	The Change was the Cara and Change and Son Isra
GIU (era LAL	Ile Gln Asn Tyr Arg Cys Arg Gly Asp Asp Ser Lys
1707 /	יות מוי	5 10 15 Ala Arg
var (arm Gra	via vià

20

```
<210>
               3
    <211>
               33
    <212>
               DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer_bind
    <223>
               forward primer for VCIP
    <400>
               3
ggaggatece tegegeegea geeagegeea tge
                                         33
    <210>
               4
    <211>
               25
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer_bind
    <223>
               reverse primer for VCIP
    <400>
                                25
gtggcaccta catcatgttg tggtg
    <210>
               5
               22
    <211>
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
              primer_bind
    <221>
               forward primer for human uPAR
    <223>
    <400>
cttcctgaaa tgcgtcaaca cc
                             22
    <210>
               6
    <211>
               22
    <212>
               DNA
    <213>
              Artificial Sequence
```

```
<220>
     <221>
               primer_bind
     <223>
               reverse primer for human uPAR
     <400>
               6
tcatagctgg gaaaactgag gc
                             22
     <210>
               7
               22
     <211>
     <212>
               DNA
     <213>
               Artificial Sequence
     <220>
     <221>
               primer bind
     <223>
               forward primer for \beta-actin
     <400>
                             22
ggctgtgcta tccctgtacg cc
     <210>
               8
     <211>
               22
     <212>
               DNA
     <213>
               Artificial Sequence
     <220>
     <221>
               primer bind
               reverse primer for \beta-actin
     <223>
     <400>
gggcagtgat ctccttctgc at
                             22
     <210>
               9
     <211>
               23
     <212>
               DNA
     <213>
               Artificial Sequence
     <220>
     <221>
               primer_bind
     <223>
               forward primer for GAPDH
     <400>
ggtctcctct gacttcaaca gcg
                              23
```

```
<210>
               10
     <211>
               24
     <212>
               DNA
     <213>
               Artificial Sequence
     <220>
     <221>
               primer_bind
     <223>
               reverse primer for GAPDH
     <400>
               10
ggtactttat tgatggtaca tgac
                               24
     <210>
               11
     <211>
               6
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a peptide containing RGD sequence
     <400>
               11
Gly Arg Gly Asp Ser Pro
                 5
     <210>
               12
     <211>
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               HA-tag
     <400>
               12
Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
                 5
     <210>
               13
     <211>
               311
     <212>
               PRT
     <213>
               Unknown
     <220>
```

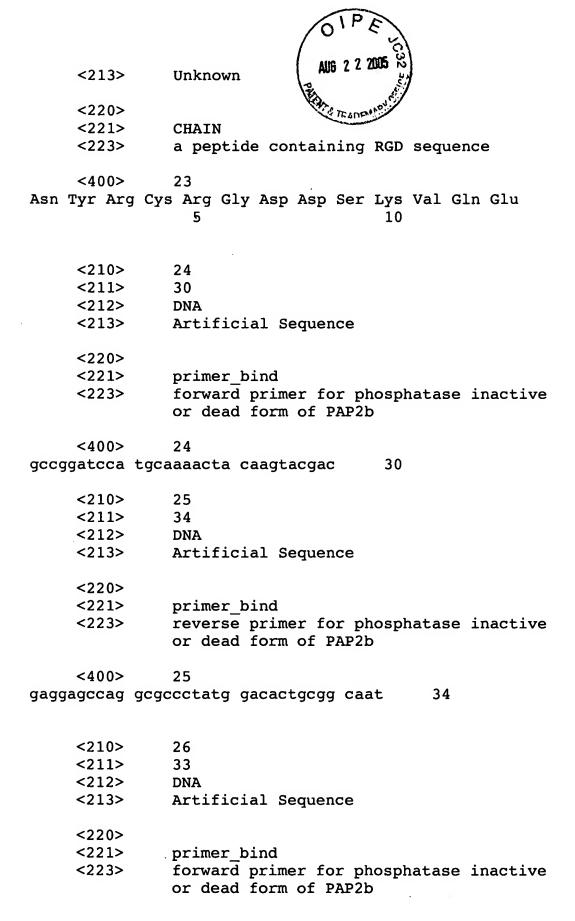
<221> CHAIN <223> human VCIP

<400> Met Gln Asn Tyr Lys Tyr Asp Lys Ala Ile Val Pro Glu Ser Lys Asn Gly Gly Ser Pro Ala Leu Asn Asn Asn Pro Arg Arg Ser Gly Ser Lys Arg Val Leu Leu Ile Cys Leu Asp Leu Phe Cys Leu Phe Met Ala Gly Leu Pro Phe Leu Ile Ile Glu Thr Ser Thr Ile Lys Pro Tyr His Arg Gly Phe Tyr Cys Asn Asp Glu Ser Ile Lys Tyr Pro Leu Lys Thr Gly Glu Thr Ile Asn Asp Ala Val Leu Cys Ala Val Gly Ile Val Ile Ala Ile Leu Ala Ile Ile Thr Gly Glu Phe Tyr Arg Ile Tyr Tyr Leu Lys Lys Ser Arg Ser Thr Ile Gln Asn Pro Tyr Val Ala Ala Leu Tyr Lys Gln Val Gly Cys Phe Leu Phe Gly Cys Ala Ile Ser Gln Ser Phe Thr Asp Ile Ala Lys Val Ser Ile Gly Arg Leu Arg Pro His Phe Leu Ser Val Cys Asn Pro Asp Phe Ser Gln Ile Asn Cys Ser Glu Gly Tyr Ile Gln Asn Tyr Arg Cys Arg Gly Asp Asp Ser Lys Val Gln Glu Ala Arg Lys Ser Phe Phe Ser Gly His Ala Ser Phe Ser Met Tyr Thr Met Leu Tyr Leu Val Leu Tyr Leu Gln Ala Arg Phe Thr Trp Arg Gly Ala Arg Leu Leu Arg Pro Leu Leu Gln Phe Thr Leu Ile Met Met Ala Phe Tyr Thr Gly Leu Ser Arg Val Ser Asp His Lys His His Pro Ser Asp Val Leu Ala Gly Phe Ala Gln Gly Ala Leu Val Ala Cys Cys Ile Val Phe Phe Val Ser Asp Leu Phe Lys Thr Lys Thr Thr Leu Ser Leu Pro Ala Pro Ala Ile Arg Lys Glu Ile Leu Ser Pro Val Asp Ile Ile Asp Arg Asn Asn His His Asn Met Met

```
<210>
               14
     <211>
               18
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               lipid phosphatase domain of human VCIP
     <400>
               14
Asp Ile Ala Lys Val Ser Ile Gly Arg Leu Arg Pro His Phe Leu
                                       10
                                                            15
Ser Val Cys
     <210>
               15
     <211>
               18
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a rat peptide containing lipid
               phosphatase domain
     <400>
               15
Asp Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Leu
                 5
                                       10
                                                            15
Ala Val Cys
               16
     <210>
     <211>
               18
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a mouse peptide containing lipid
               phosphatase domain
     <400>
               16
Asp Ile Ala Lys Tyr Thr Ile Gly Ser Leu Arg Pro His Phe Leu
                                                            15
Ala Ile Cys
```

```
<210>
               17
     <211>
               18
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a human peptide containing lipid
               phosphatase domain
     <400>
               17
Asp Leu Ala Lys Tyr Met Ile Gly Arg Leu Arg Pro Asn Phe Leu
                  5
                                                            15
                                       10
Ala Val Cys
     <210>
               18
     <211>
               18
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a Drosophila peptide containing lipid
               phosphatase domain
     <400>
               18
Asn Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Tyr
                  5
                                       10
                                                            15
Thr Leu Cys
     <210>
               19
     <211>
               18
     <212>
               PRT
     <213>
               C. elegans
     <220>
     <221>
               CHAIN
     <223>
               a C. elegans peptide containing lipid
               phosphatase domain
     <400>
               19
Ile Val Thr Lys His Val Val Gly Arg Leu Arg Pro His Phe Leu
                  5
                                       10
                                                            15
Asp Val Cys
```

```
<210>
               20
     <211>
               10
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a peptide containing RGD sequence
     <400>
               20
Asn Tyr Arg Cys Arg Gly Asp Asp Ser Lys
                  5
                                       10
     <210>
               21
     <211>
               10
     <212>
               PRT
     <213>
               Unknown
     <220>
     <221>
               CHAIN
     <223>
               a peptide containing a mutated RGD sequence
     <400>
               21
Asn Tyr Arg Cys Arg Ala Asp Asp Ser Lys
                5
                                      10
     <210>
               22
     <211>
               10
     <212>
               PRT
     <213>
               Unknown ...
     <220>
     <221>
               CHAIN
     <223>
               a peptide containing a mutated RGD sequence
     <400>
               22
Asn Tyr Arg Cys Arg Gly Glu Asp Ser Lys
     <210>
               23
     <211>
               13
     <212>
               PRT
```



```
26
    <400>
tgccgcagtg tccatagggc gcctggctcc tca
                                        33
    <210>
              27
    <211>
              24
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
              reverse primer for phosphatase inactive
    <223>
              or dead form of PAP2b
    <400>
              27
gcgatcgatc tacatcatgt tgtg
                              24
    <210>
              28
    <211>
              27
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
    <223>
              forward primer for N-terminal PAP2b truncation
    <400>
              28
gccggatcca tgcaaaagcg ggtgctg
                                 27
    <210>
              29
    <211>
              25
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
    <223>
              reverse primer for N-terminal PAP2b truncation
    <400>
              29
ggtatcgata agcttctaca tcatg
                               25
    <210>
              30
    <211>
              30
```

```
<212>
               DNA
     <213>
               Artificial Sequence
     <220>
     <221>
               primer bind
     <223>
               forward primer for C-terminal PAP2b truncation
     <400>
               30
gccggatcca tgcaaaacta caagtacgac
                                     30
     <210>
               31
     <211>
               25
    <212>
               DNA
    <213>
               Artificial Sequence
    <220>
    <221>
               primer bind
    <223>
               reverse primer for C-terminal PAP2b truncation
    <400>
               31
cgcgatcgat ctacgtcgtc ttagt
                                25
    <210>
               32
    <211>
               6
    <212>
               PRT
    <213>
               Unknown
    <220>
    <221>
               CHAIN
    <223>
               a peptide containing a RGD sequence
    <400>
               32
Cys Arg Gly Asp Asp Ser
    <210>
               33
    <211>
               24
    <212>
               DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
    <223>
               sense primer for human Alu sequence
```

```
<400>
              33
                               24
gttgcccaag ttggagtgca atgg
    <210>
              34
    <211>
              24
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
    <223>
              anti-sense primer for human Alu sequence
    <400>
              34
acaatggctc acgcctgtaa tccc
                               24
    <210>
              35
    <211>
              29
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
    <223>
              sense primer for mouse GAPDH
    <400>
              35
tggagtctac tggtgtcttc accaccatg
                                   29
    <210>
              36
    <211>
              25
    <212>
              DNA
    <213>
              Artificial Sequence
    <220>
    <221>
              primer bind
    <223>
              anti-sense primer for mouse GAPDH
    <400>
              36
gcaggagaca acctggtcct cagtg
                               25
    <210>
              37
    <211>
              6
    <212>
              PRT
    <213>
              Artificial Sequence
```

```
<220>
     <223>
               amino acid sequence for apical sorting of PAP2a
     <400>
                    37
Phe Asp Lys Thr Arg Leu
                 5
     <210>
               38
     <211>
               9
     <212>
               PRT
     <213>
               Artificial Sequence
     <220>
     <221>
              UNSURE
     <222>
               2, 3, 4, 5, 6, 7
     <223>
               lipid phosphatase motif of GST-VCIP-RGD
               protein; Xaa = any at pos 2-7
     <400>
                    38
Lys Xaa Xaa Xaa Xaa Xaa Arg Pro
                 5
     <210>
               39
     <211>
               4
     <212>
               PRT
     <213>
              Artificial Sequence
     <220>
     <223>
              motif of of GST-VCIP-RGD protein
     <400>
                    39
Pro Ser Gly His
    <210>
               40
     <211>
               12
     <212>
               PRT
    <213>
               Artificial Sequence
    <220>
     <221>
               UNSURE
     <223>
               anti-sense primer for mouse GAPDH
```

<400> 40 Ser Arg Xaa Xaa Xaa Xaa His Xaa Xaa Asp 5 10 41 <210> <211> 5 <212> PRT <213> Artificial Sequence <220> <223> amino acid sequence in peptide derived from VCIP <400> 41 Cys Arg Gly Asp Asp 5